

Donnybrook

Green Streets



Quick Facts

Watershed:	Rock Creek
Sub-Watershed:	Bethesda Mainstem
Completion Year:	2015
Impervious Area Treated:	3.42 acres
Maryland DNR Trust Fund Grant Award:	\$733,984

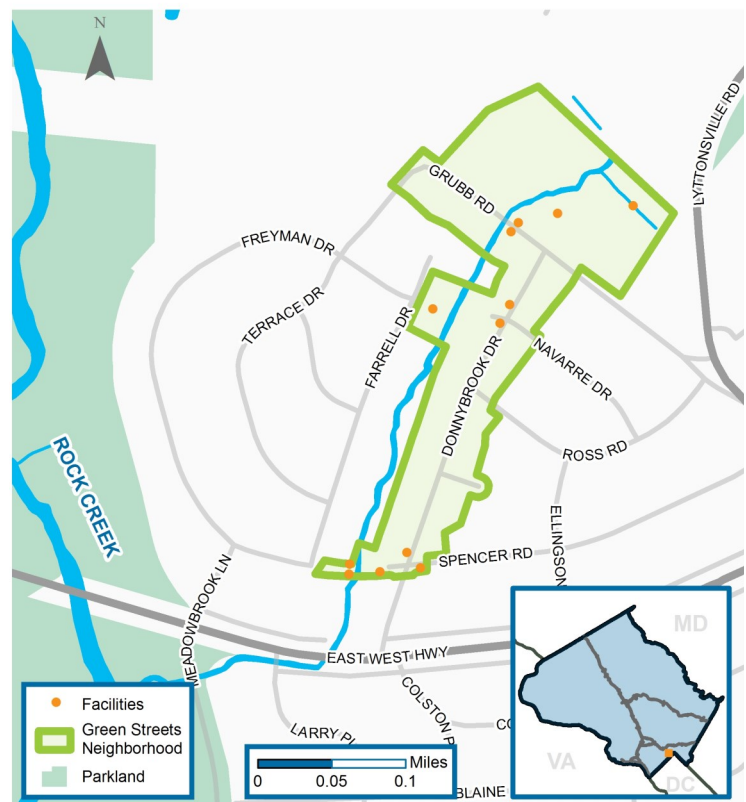
Pre-Restoration Conditions

Much of the development in the Rock Creek watershed occurred before today's stormwater management practices were in place. In older neighborhoods, stormwater runs off roofs, driveways, and roads into storm drains and directly into streams, sometimes carrying trash, oils or pollutants. The runoff also moves rapidly over paved surfaces, causing higher flows during storms, erosion, streambank instability, and degraded habitat.

Design Approach

DEP installed a greenstreets project in the neighborhood draining to its Donnybrook tributary restoration project. In highly developed neighborhoods, roadway rights-of-way are often the only available public space to provide stormwater management. Providing treatment along streets addresses stormwater as close to the source as possible protects water quality downstream.

Two bioretention rain gardens, four bioswales, and six tree boxes were installed in the neighborhood. These slow down and filter stormwater runoff flowing off the roadway. Sediment, nutrients, and other pollutants are removed and the volume of runoff is reduced. Captured stormwater infiltrates into the ground, helping recharge local streams and provide healthy habitat for fish.



Water Quality Protection

DEP restoration projects help reduce sediment and nutrient pollution entering local waterways and the Chesapeake Bay.

Nitrogen
Reduced
42.5
lbs/yr

Phosphorus
Reduced
3.62
lbs/yr

Sediment
Reduced
1820
lbs/yr

Traffic Calming Rain Gardens



Two bioretention rain garden swales were added to Grubb Road to capture and filter stormwater runoff at the crossing with Donnybrook tributary. The gardens “bump-out” into the street to provide additional garden space and traffic calming.

Bioretention Swale



A bioretention swale was installed at the Rock Creek Pool Parking lot. The swale captures and filters stormwater runoff before it enters downstream Donnybrook tributary. Donnybrook tributary was restored in tandem with the Green Streets project.

Contact Us:

AskDEP@montgomerycountymd.gov



This project was funded by Maryland's Chesapeake & Atlantic Coastal Bays Trust Fund and Montgomery County's Water Quality Protection Charge